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GOVERNANCE TOWARDS A GREEN FUTURE

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1 Introduction

Achieving a green future for all is – as the other chapters in this book have shown – no simple task. Some of the key limitations and obstacles to sustainable development and to avoiding the dangerous consequences of environmental change are partly due to the structures and workings of political institutions. In order to govern in accordance with the vision of a green future for all, one needs the right kinds of institutions, norms, principles, actors and power balances. As discussed throughout this book, we take a human rights-based approach to be particularly promising, since enshrining ethics of a green future would provide us with an established political, legal and moral starting points for distributing entitlements, responsibilities, duties and burdens so as to make a green future for all possible. However, as this chapter will show, environmental governance is an extremely complex field and it thus would be naive to assume that the establishment of rights to a green future would in and of itself provide a panacea for existing shortfalls in governance practice.

The aim of this chapter is to bring together some of the key observations made in the other chapters, to utilise the rights-based framework developed earlier and to address particular challenges to devise legitimate and effective governance for a green future. In so doing, we will draw on a couple of cases that demonstrate obstacles to sustainable politics and governance following from the prevailing discourses of (un)sustainability, economic feasibility and national interest short-termism. In response to these issues, we will highlight possible roads to sustainable politics and governance which draw on the idea of rights to a green future and which seem to require institutional changes, motivational changes and a shift in sustainability discourses in order to address – among many other issues – the differences between affluent and poor countries more adequately.

As it stands, existing environmental governance practice has significant deficits, no matter whether regarded at the local, regional, national, transnational or global level. Some of the problems seem to stem from democratic governance, since, for example, the attitudes of political decision makers in democracies can be expected to have a great deal of overlap with those of their constituencies, which means that the limitations of future-oriented moral attitudes and the motivational barriers to future-oriented action of citizens are likely to have a considerable impact on politics. At the same time, though, many transnational institutions for environmental governance lack democratic legitimacy and accountability. Additionally, many environmental policies tend to be implemented according to standardised procedures in accordance with internationally acknowledged rules and regulations, such as Agenda 21, many of which are controversial from the normative viewpoint of intergenerational global justice and sustainability. On top of this, politics in general struggles to adequately prepare for and regulate in light of future risks and uncertainties. In other words, to make our world future-proof is something politics struggles with because of its generally flawed understanding of risk. Last but not least, a particular obstacle to achieving a green future for all concerns how the differences between developed and developing countries tend to be glossed over, and the way in which global power politics shapes the normative landscape of global to local governance regimes.

Our approach in this chapter is to flag up how roads to sustainable politics depend on a successful interplay between the right kind of normative framework, the wide use of different governance tools, careful institutional design and underlying motivational driving forces. We hope to show that in order to succeed we need to look for roads in plural, i.e. roads that are suitable for the different contexts of sustainable politics and that achieve a green future for all.

In the following sections we will first outline a generic overview of issues in relation to environmental governance. We will touch on issues such as the rebound effect, future-proofing policymaking, and motivational obstacles to sustainability, before moving on to three concrete cases which will make the issues discussed tangible and which highlight the need to contextualise our governance responses. In section 7 we connect our discussion on governance to important findings from the other chapters of the book. Finally, in section 8 we offer some concluding remarks on roads to sustainability.

2 Global environmental governance: some preliminary remarks

The focus in this section is to give a brief generic overview of global environmental governance and its multifaceted nature. *First of all*, it is important to be clear about what falls under the umbrella term 'governance'. Governance refers to processes of governing, including the agents that participate in particular practices of governance. Hence governance is not limited to actions and structures of states but also includes markets, trade, law, civil society, networks and individuals. Moreover, tools for governance come in many different shapes and forms, including but not limited to laws, norms, treaties, language, culture and power.

Environmental governance proves to be particularly complex since its object, that is, the environment, is affected by a whole range of processes, practices and policies, including those that are not directly aimed at the environment and occur on many different levels. Moreover, 'the environment' as the object of governance is in itself too opaque and complex to be treated as a unified whole. This is perhaps why we often see that laws, norms and treaties within environmental governance normally single out particular aspects of the environment that they aim to regulate, such as the levels of toxins in soil and water or the taxation of fossil-based combustibles. When over ten years ago Ronald Mitchell (2003) counted the number of international environmental agreements, there were more than 750. This number has been increasing even further since. There is a vast array of bilateral, multilateral, transnational, international and global environmental governance norms, treaties and principles, spanning the whole spectrum from the informal via soft law to hard law. For the remainder of this section we will focus on a few key examples and explain some of the main prospects and challenges of international environmental governance.

One aspect of the current global environmental governance regime that is particularly often subject to criticism is the fact that the current system is very fragmented, with no central and powerful environmental agency in place by which it could shape international policy and exert a certain amount of pressure onto non-complying states to be more sustainable. Critics argue that the world needs a stronger central agency for environmental matters since existing institutions like the United Nations Environment Programme (UNEP) lack the cohesion, power and political support to adequately address global environmental issues, especially if individual states oppose UNEP's policies. This criticism often goes hand in hand with the observation that international environmental law lacks the backing of an international court solely designed to adjudicate environmental disputes. While the International Court of Justice (ICJ) is in theory equipped with the power to process environmental cases, in its actual practice the ICJ has not only never used its existing (on paper) environmental chamber, but it has also treated the few environment-related cases it had in a distinctly non-environmental way, that is, strictly in terms of whether particular international agreements had been violated (for details, see Stephens 2009). Therefore, some commentators have called for the establishment of an international court of the environment, a forum in which newly enshrined environmental rights could be claimed and protected.

Both these proposals, i.e. the suggestion that states should create a world environment agency as well as an international court for the environment, point to problems with a central feature of the current global environmental governance regime, namely, the fact that most environmental governance is based on voluntary collaboration between states, supported by customary norms, non-binding agreements and other soft law instruments. Some critics think it would be better to have binding norms which are centrally enforceable, which is one of the primary reasons why these critics call for the establishment of a central agency and a court of the environment. It is true, that the bulk of existing global environmental governance

tools is not intended to strictly enforce environmental goals and establish legal liabilities for parties that fail to comply, but rather to develop and sustain collaborative efforts among individual sovereign states to make our world safer and more sustainable. However, while this approach has obvious downsides (e.g. no legal enforceability of most norms) and a mixed track record (e.g. the slow and thus far insufficient response to global anthropogenic climate change), it should be noted that this approach has also delivered on several occasions (e.g. the phasing out of CFCs through the adoption of the Montreal Protocol) and that stricter regulations might be hard to establish, which means one should be careful not to throw out the child with the bathwater. For instance: past attempts to establish strict liability principles, such as the Council of Europe's (CE) Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, have been ill-fated. All that was needed to put the CE's convention into effect was its ratification by three member states. However, in the end, the convention failed. It is not very surprising, then, that the 1972 Stockholm Declaration of Principles, which was adopted at the end of the 1972 United Nations Conference on the Human Environment, does not propose any liability mechanisms, but only mentions liability as a future principle (see Chapter 5).

For better or worse, it is therefore still sovereign states that wield significant power within the existing international environmental governance regime. It is states that are the parties to existing multilateral environmental agreements and it is often (no matter whether openly or covertly) state interests that shape policies, recommendations and norms developed within existing environmental governance institutions. The effects of state-led global environmental governance vary significantly. While the 1992 Earth Summit is often credited with establishing the precautionary principle in international environmental governance, Agenda 21, which was intended to put the idea of sustainable development into law, has been heavily criticised for being too business-friendly and neoliberal in its outlook.[1] Precaution and sustainable development are both among the ten core principles of the existing global environmental regime. The other eight principles are: cooperation, sovereignty, no harm, sustainable use, equitable use, intergenerational equity, the polluter pays principle and common but differentiated responsibilities (Stephens 2009). Even though most of these principles are not without controversy, they provide the backbone of today's climate and environmental governance. Hence it is not surprising that all these principles have played a major role within the negotiations of the United Nations Framework Convention on Climate Change. Principles like precaution have gradually changed the discursive governance landscape, leading to a partial shift in justificatory logic from something being permissible until shown to be harmful to a more precautionary approach, which calls for scientific evidence to show that certain actions are not harmful and to adopt the strategy 'better safe than sorry' (see section 4).

What is important when talking about global and international environmental governance is to disaggregate its various dimensions. Apart from the obvious, that is, the political and legal dimensions, environmental governance includes an

economic dimension, a social dimension, a psychological dimension and a technological dimension.

The political dimension, as pointed out above, is dominated by the governments of sovereign states. It is states that shape agendas and make agreements, while there is basically no democratic control over the myriad of transnational environmental organisations that exist. This points to the worry about a distinct lack of legitimacy in current environmental governance arrangements. Environmental governance is often technocratic, since it is elites and experts who decide what kind of policy is adopted and for which reasons. While the rise of expert-led policymaking is in part due to the complexities of the environmental problems we face today, there is a worry that important decisions about societal risk-taking and future well-being are made by a group of unelected technocrats, bureaucrats and industry representatives. Thus, many governance schemes lack democratic legitimacy and accountability, that is, they are not democratically controlled.[2]

The legal dimension, as also pointed out above, is dominated by soft law instruments, since global environmental hard law is somewhat underdeveloped and difficult to enforce within the existing legal fora. At the same time the implementation, interpretation and enforcement of new and existing legal tools is crucial for advancing the future-proofing of society. However, in some cases different legal and normative orders conflict with one another, such as for instance in the case of EU-imposed border tax adjustments for making sure that the EU's internal carbon tax/emissions trading regime would not disadvantage EU products, which some lawyers deemed to be incompatible with existing WTO legislation.[3]

The economic dimension does not only concern the costs of adopting certain measures, such as whether the countries of the developed global North should compensate Ecuador and its citizens for the income they forgo by choosing to preserve the Yasuni National Park and its biodiversity rather than exploiting the large amounts of oil reserves that were discovered below the park (see section 6). The economic dimension also includes questions such as whether one should invest more in alleviating poverty or saving the environment.

The social dimension is about the social costs and effects of environmental governance, while the social support for and the effectiveness of particular governance measures is tightly connected with the motivations and preferences of different actors, an aspect that is captured by the psychological dimension (see more on this in Chapter 9).

Last but not least, the technological dimension of environmental governance includes the use of different technologies and their feasibility, including renewable energies such as tidal energy or the potential use of so-called 'geo-engineering techniques'.

As argued earlier in the book, one key element we believe to be crucial for strengthening the enforceability and stringency of environmental governance are environmental rights (see Chapter 2). However, environmental rights come in many ways, shapes and forms. Normatively speaking one first of all needs to differentiate between individual environmental rights and collective environmental

rights, as well as between rights whose bearers are humans only, humans and other animals, or no humans but the environment as such. Depending on which normative framework one chooses one can end up with very different environmental rights, not only in terms of their direct content, but also their scope and demandingness. Generally speaking – with regard to the content of environmental rights – large differences exist, since some environmental rights express general claims to a vaguely defined valuable good, such as rights to a safe environment. Other environmental rights express direct entitlement rights, such as rights to clean and sufficient water, or rights to life-sustaining ecosystem services. However, it is also possible to frame environmental rights as rights of the environment, or of animals or ecosystems; this way of framing environmental rights intends to establish strong non-human rights claims in order to curb humans' negative influence on the planet and its non-human inhabitants. In many other cases environmental rights are intended to express the idea that a healthy and safe environment is a necessary condition for the prolonged fulfilment of most other rights.[4] Therefore, environmental rights are sometimes seen as meta-rights, or the legal expression of meta-capabilities (that is, the things we need to be able to do in order to be able to be capable of anything – if we are to work, for instance, we need to be able to breathe) (for a detailed argumentation on this, see Chapter 2). Furthermore, one of course needs to distinguish between philosophical theories and accounts of environmental rights and politically and legally existing environmental rights. The distinction between the moral dimension of rights as different from political and legal rights is important, since the practice of environmental rights and laws can obviously deviate quite significantly from the initial normative underpinnings and intentions. While legal and political interpretations of constitutional environmental rights naturally vary, the existence of such rights provides a huge normative resource for progressive sustainable governance. At the same time, the legal acceptance of environmental rights can always only be part of a more complex solution, since rights – in order to be effective – need enforceability, accountability and responsibility to go along with them. Our discussion throughout the remainder of this chapter will highlight the importance of rights-based environmental governance across a range of issues.

Global and international environmental governance touches upon all of the issues discussed earlier in this book, including risks, rights, economics and the relationship between affluent and poor countries. We will discuss these issues throughout the following four sections, using three particularly informative examples in order to explain the issues at hand: the case of the Guangdong fisheries (case 1); the Sardar Sarovar (Narvada dams) in India (case 2), and the failure of the Yasuni–ITT Initiative (case 3). Cases 1 and 2 illustrate a huge range of governance issues related to: lack of coordination, context-blind coordination of Agenda 1, misplaced expertise, conflicting interests between nutrition and sustainable politics, lack of solidarity within the current generation, and the need for collective environmental rights. Case 3 relates in particular to developing countries, and analyses the case from diverse angles, thus aiming to shed light on normative dilemmas. All these cases illustrate the complexity of the normative, social, political and economic

demands shaping environmental governance and allow us to flesh out the normative potential of using a rights-based approach to sustainable governance.

3 Governance towards intergenerational justice

In this section of the chapter we will focus on the difficulty of representing future generations in democratic and international decision-making practices, especially with regard to possibly fulfilling the wide-ranging demands of intergenerational justice. In so doing we shed light on both the utter dependence of future generations on the decisions and policies of current people, as well as the worrying lack of long-termism in current democratic institutions (see more on this in Chapter 6).

3.1 Representation of future generations

Initially we need to decide how to define 'future generations'. We shall argue that there is a need to extend the scope beyond national societies, and also beyond the human species, i.e. to an anthropocentric view that also includes nature not just as an object to serve human interests. Further, we shall argue that our current ethical commitments are internally connected with our obligations towards future generations (Alvarez and Thorseth 2015). The question whether and how to represent future generations is complex, as it raises questions such as whether we can harm people we do not yet know, and who have not yet been born. We shall leave aside the non-identity question discussed extensively by Parfit (1986). Rather, we shall argue that currently living people have commitments towards future generations for reciprocity reasons. Reciprocity can be considered a possible moral motivation to conserve natural resources for the sake of future generations. There are reasons for paying forward the benefits we enjoyed from past residents of our common planet earth. One reason is akin to John Rawls's idea of just savings for the stability of the basic structure of the society of future generations (see Rawls 1971, section 44; see Meyer 2008). The amount of savings should be sufficient for future generations to continue with a society stable enough for members to meet their own needs, to fulfil their obligations to one another and to contribute to their just savings for their future generations (Alvarez and Thorseth 2015). This is also based on the most prevailing definition of 'sustainable development':

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
>
> *(World Commission on Environment and Development 1987 aka Brundtland Commission 1987)*

Governance towards intergenerational justice thus presupposes intragenerational justice as well, or so we shall argue. Briefly, this is because we do face conflicts having to do with the fact that we may have to choose between, on the one hand, protecting the environment in order to meet intergenerational challenges, and on

the other, avoiding the exacerbation of inequalities among those presently living (see Chapter 8 on developing countries).

3.2 Sufficientarianism, frugality and the rebound effect

Sufficientarianism is a theory of distributive justice. Rather than being concerned with inequalities as such or with making the situation of the least well off as good as possible, sufficientarian justice aims at making sure that each of us has enough. The problem is, however, that we need to make sure that limited resources are compatible with a certain standard of living for all. Thus, frugality among the rich should in principle contribute to the right direction, i.e. towards inter- and intragenerational justice. In order to govern towards inter- and intragenerational justice there is one particular obstacle that has to be overcome, though. This is the rebound effect. Briefly speaking, the rebound effect may be described as an unintended effect of frugal behaviour in the rich world. The reason is that frugal behaviour causes new consumption by others (Alcott 2008: 7). As an example, technological improvement results in improved fuel efficiency, which in turn leads to more consumption of fuel, as it becomes cheaper.

Frugality through for instance purchase of emission certificates is often considered a transfer in the name of equity (Alcott 2008: 15). The problem is that such affluence-lowering measures address only the rich. In order to make frugality contribute to a sufficiency level for all, i.e. to a more equal distribution of available resources, there has to be a possibility of transfer in purchasing power. It does not help much if frugality among the affluent is not transferred to purchasing power for the poor. Briefly, the problem remains as long as the poor have no power to change their consumption. Without a transfer in purchasing power to either present or future poorer people, frugality among the rich will have no sustainable impact, with respect neither to intragenerational equity, nor to intergenerational justice (Alcott 2008: 15). In order to illustrate this point Alcott mentions that without an explicit transfer, the beneficiary of the income effect could be an affluent neighbour who heats his swimming pool more often. We are sympathetic to this approach to the rebound dilemma as it gives a fruitful starting point for criticism of a prevailing regime within sustainability discourses.

In this paragraph we aimed at showing that in order to govern towards intra- and intergenerational justice we need to enable a transfer of purchasing power in order to accommodate equality more equal distribution of available resources. Frugality among the current living will only serve the purpose of sufficiency while at the same time avoiding the rebound effect. Only then will frugality among the rich serve the poor. More importantly, though, is to extend environmental rights to include non-human nature, which should not be treated as commodities, but instead as commons. In view of this it is probably misleading to discuss sufficiency in terms of a transfer in purchasing power in the first place.

While Alcott's main point is that personal shifts to frugality guarantee neither present nor intergenerational equality, we would like to focus on the idea that

environmental rights need to be extended to non-human nature as well. Then it becomes obvious that even if it were possible to implement a transfer of purchasing power, this would still be inadequate with regard to environmental rights that include non-human nature. Such rights cannot be treated as purchasable commodities. Rather, there is a need for another kind of transfer, namely of the sustainability vocabulary with respect to environmental rights.

4 Uncertainties and risk concerns in future-oriented governance

While law- and policymaking is, at some level, always future-oriented, some people hold that environmental policies should be particularly 'future-proof'. In this section, we will briefly discuss what this might actually mean and how the taking of certain risks might be deemed acceptable. In the context of global environmental change, the scale and nature of the relevant risks, the different layers of uncertainty besetting the issue of large-scale and long-term environmental governance, the temporal scope of the problems (and their possible solutions), and the evident time lag between decision-making and the materialisation of future positive and negative consequences make decision-making particularly difficult. The temporal problem of climate policy is thus a dual one. On the one hand, it takes relatively long for emissions to negatively affect the climate. Yet policies also come with a distinct time lag problem of their own, since the presumed benefits of many policy decisions will only materialise in the not-to-near future. Moreover, many of these benefits are actually the avoidance of major risks/harms, and thus might not even be particularly tangible. Many policymakers seem to face (or at least think they face) a dilemma between choosing policy A and saying to their voters 'You should thank me because I just made sure you will have access to affordable energy, great shopping malls and high speed internet in a year' and choosing policy B and saying 'You should thank me because if I had acted differently your children would be much more likely to be killed in a flood'. While this contrast is obviously too crude to be particularly helpful in thinking about the issue, it is important to keep these concerns in mind for the discussion in this section and the next (section 5).

Further major issues for policymakers with regard to governing climate change are related to issues mentioned earlier in this book: people's poor understanding of the relevant differences between predictions, models, scenarios and probabilistic forecasts (see Chapter 4); people's difficulty to understand and normatively assess the nature of the kinds of risks connected to climate change; the scope and nature of the various kinds of uncertainties involved. However, the risks associated with global climate change are so large and serious that it is crucial that we carefully distinguish between predictions, scenarios and probabilistic forecasts and that we establish reliable mechanisms for governing issues, technologies and processes and the corresponding risks (see Chapter 3).

Probably the most often used and most successful attempt at establishing a reliable risk governance protocol is the precautionary principle, which has become a cornerstone of international environmental governance. However, the effectiveness

of the principle is contested, especially since at the national level precaution is interpreted in various ways with different degrees of stringency (Feintuck 2005). Moreover, in the context of anthropogenic climate change, policymakers face real difficulties in assessing and regulating future risks. This is particularly true for risks that are the outcomes of cumulative processes, since it is often difficult to establish clear chains of causality – which leads to a denial of responsibility – and to give accurate prognoses of exact effects. One of the key benefits of using a precautionary approach to environmental governance is that it establishes a justificatory logic which forces policies to make the case for their being future-proof. However, at the same time precautionary governance can only be effective and helpful if it goes hand in hand with the establishment of clear risk thresholds, since taking a zero-risk approach to technological and political change is simply unfeasible. That is to say, successful precautionary governance requires a sound normative and practical understanding of different forms of risk and their acceptability.

In order to establish acceptability thresholds for risk-taking scenarios, a rights-based framework proves invaluable. Defining key basic rights, including environmental rights, allows us to carve out the difference between morally permissible and impermissible risk-taking. However, we want to emphasise that the determination of acceptability thresholds should be based on a multidimensional metric, not a monodimensional one. That is to say, instead of calculating risks simply as 'negative utility of P times probability of P' we should be sensitive to the different values that can be affected by particular instances of risk-taking, such as well-being, fairness and equality, all three of which can be understood either intragenerationally or intergenerationally. Moreover, one's framework should be sensitive to different kinds of risks, since irreversible systemic risks should probably be treated differently from recoverable isolated risks, even though the latter might involve huge negative utility.

Risk governance, irrespective of the level at which it operates, needs to be context sensitive, though. That is to say, when dealing with complex environmental problems it seems naive to assume that we could settle for one-size-fits-all approaches. Policies that might work in one case may not work in a seemingly similar case because of a range of external factors (see section 5). Moreover, we live in a multirisk world (Wiener 2002), so in most cases risk governance is not about the complete avoidance of certain risks, but about a careful balancing and controlling of a myriad of potential risks.[5] Here we simply aimed to show that the determination of acceptability thresholds for particular risks and risk governance in general often have to be settled on a context-sensitive basis.

5 Obstacles to sustainable governance

There are many obstacles to achieving sustainable governance. Additional to the generic part of this chapter we want to highlight the need for context sensitivity and real-life implementation by looking into concrete cases of governance challenges. Within this section and the next, though, we want to leave the more principled and abstract discussions of the previous sections behind and focus on two

real-world cases, in order to illustrate the nature and extent of the problems sustainable governance faces. In this section we first describe cases 1 and 2, followed by an analysis in terms of institutional and motivational obstacles. Case 3 is further developed in the following section. In focusing on these cases, we want to draw out the different kinds of obstacles that stand in the way of more sustainable governance. The most serious obstacles are institutional, motivational or both. Let us first present the cases, and thereafter proceed to identifying the character or nature of the obstacles.

Case 1 Guangdong fisheries in southern China

This case (Ferraro and Brans 2012) concerns the rapid economic growth followed by strong exploitation of fishery resources in the Guangdong province in southern China, relating to both the fish stock and marine environmental deterioration. One obvious tension here is rather general as it points to the conflict between environmental protection and economic development. The case in view demonstrates how this conflict pans out at a local level, due to a range of institutional obstacles. One remarkable conflict is about diverging objectives both at an inter- and intraorganisational level. Briefly, the conflict occurs between the national State Oceanic Administration (SOA) and the Fisheries Management Bureau (FMB), i.e. the national and the subnational levels. Whereas the former acts as 'the ruler of the sea', the latter acts as 'the servant of the fishers' (Ferraro and Brans 2012: 41). The conflict is thus about protection on the one hand and increasing economic growth on the other. According to Agenda 21 and other international regulations there are some international conventions to be implemented at the local level in different countries. However, when such objectives are implemented at the local level, responsibility is often delegated to the subordinate level, which in the *Guangdong* case is the provincial level regulated by the FMB. Several obstacles are present: (i) the policy implementation is captured by informal patron–client-type relationships (local governmental level); (ii) management responsibility is transferred to the FMB, which owns a huge fishing company; and (iii) the FMB is responsible for its own budget.

This case demonstrates how fiscal decentralisation leads to bureaucratic fragmentation and vertical specialisation: those who are responsible for environmental protection have no direct say in the implementation of the protection policies, which are governed by those who also have ownership interests in the fisheries production. In the *Guangdong* case there is even a further complication having to do with a certain division at the central level, so that fisheries management and environmental protection remain separate competencies. Now, this case most likely demonstrates more than an average amount of institutional obstacles. Additionally, as pointed out above, the authors found the 'ruler' and the 'ruled' to coexist in the same agency, that is, the Federal Management Bureau being responsible for policy implementation and also being the owner of an important fishing company.

The *Guangdong* case serves as an illustration of institutional obstacles to sustainability, mainly concerning the lack of adequate coordination of action. This flaw could be described in different ways. It is partly a demonstration of the problem of the public to the extent that the coordination of action at the local level is corrupted, partly due to lack of well-informed actors and institutions. There clearly also is an institutional obstacle having to do with the strong belief in one technological model applied indiscriminately, including to contexts where it does not work – that is, acting according to general international rules and regulations according to Agenda 21.

Furthermore, the empowerment of people through participation seems to have little to do with concern for the environment, and a whole lot with the safeguarding of nutrition and income. In this particular case there are several reasons why environmental responsibility is evaporating. Some have to do with patron–client relationships at the local level, which prevent natural resources and environments to be governed along democratic lines.

The main point of the authors describing the *Guangdong* case was to show how Agenda 21 and other international regulations often work poorly at the level of policy implementation. Besides, the objective here is not only to illustrate how overlap of authorities and double accountability may complicate the political process. Obviously, there is a need for looking in a different direction, since the coordination of formal agencies regulating sustainability policies does not work, at least not in developing and non-democratic countries.

Some of the problems in the *Guangdong fisheries* case have to do with the absence of alternative sources of nutrition and livelihood. In this particular case one may ask whether responsible fishery is an achievable objective at all. We believe it requires no further argument that the international organisations' capacity for solving the problem institutionally is doomed to fail as long as actions at the global, national and local levels are poorly coordinated. In the *Guangdong* case there are certain values in conflict that obviously prevent efficient coordination of action, as we have seen. The most obvious conflicting values have been observed as the double role of owner and controller co-residing in the same body.

Case 2 The Narmada dams (Sardar Sarovar) in India

This is a project aiming to provide irrigation water to drought-prone areas of Gujarat (India), as well as electricity to all three states sharing the project. Sardar Sarovar is a developmental project resulting in the displacement of many rural people and in environmental degradation, while urban dwellers profited through an increase in their already high standard of living (Cullet 1995: 33).

Thus, there are different groups with claims to the same resources. Intragenerational solidarity becomes an issue when e.g. economic development entails the improvement of someone's environment or quality of life balanced by the loss of other resources and by deprivation for other people (Cullet 1995). What happened in this case is that the project fed new water-intensive industries near the main

urban centres without delivering water to its final destination – after having displaced an estimated 100,000 people who had to be relocated on new land, which is not freely available in India. Many rural people were displaced, causing significant environmental degradation, while at the same time urban dwellers already enjoying a comparatively high standard of living benefited. According to Cullet, Sardar Sarovar stands out clearly as a failure to make all people, or at least the least well off, benefit from a development project partly aimed at improving environmental conditions on a regional scale.

In addition to compromising solidarity *within* the same generation, the Sardar Sarovar project also illustrates how sustainable development still may entail environmental deterioration that is not captured by the prevailing concept of sustainable development. This is a reason why we need to address environmental rights as a kind of collective right, across and between generations. In the particular case of the Sardar Sarovar project, an intragenerational injustice is committed towards one among several groups with claims to the same resources. The case in view demonstrates how economic development may entail an improvement in the environment for certain people balanced by loss of other resources for other people, e.g. the displacement of rural people and environmental degradation benefiting urban dwellers. This case also illustrates the kind of injustice discussed in Rawls, notably the difference principle – a principle according to which the only differences allowed are those that do not disadvantage those less privileged (Rawls 1971). Against this background we may now understand environmental rights as collective rights aiming at improving the situation of the less advantaged. How could we make sense of such a concept of environmental rights?

5.1 Institutional obstacles

Lack of coordination (case 1)

Several problems of insufficient or inadequate coordination of action have been discussed in connection with the *Guangdong fisheries* case. One main issue relates to problems of delegating governance to sublevels without safeguarding communication between the global, national and local levels of governance. This problem has been identified as a challenge to the implementation of Agenda 21 locally, where the aim is to enhance sustainability, to empower people through participation, and to create ownership of the local project. These goals sound good as long as they are considered without reference to concrete contexts. However, as shown by the implementation in the *Guangdong* case, local conditions are not always consistent with these aims. This is proved by the lack of enhanced sustainability. Overfishing and environmental pollution were not reduced despite the implementation of Agenda 21. This case of overfishing and pollution also partly illustrates what has been discussed in terms of the 'tragedy of the commons', i.e. the problem of each individual trying to gain own profit while at the same time causing damage to the commons.[6]

Context-blind implementation of Agenda 21 (case 1)

Local Agenda 21 is an example of a transnational policy aimed at sustainable development in a broad sense. The protection of fragile environments and the strengthening of the role of local authorities are among the objectives. In the *Guangdong* case there are several reasons why these universal intentions do not translate to the local context. A major problem seems to consist in indiscriminate and context-blind implementation of a project that is not adjusted to the local conditions of governance (see Chapter 7 on developing countries). In the particular case of the Guangdong fisheries, responsibility is delegated to the subordinate level, which in this case is the provincial level regulated by the FMB. As such, it meets several obstacles: the policy implementation is (i) captured by informal patron–client-type relationships (at the local governmental level); (ii) management responsibility is transferred to the FMB, which owns a huge fishing company; and (iii) the FMB is responsible for its own budget.

Misplaced expertise (case 1)

Additional to the problem of context-blind implementation of Agenda 21, there is also a problem in the *Guangdong* case of misplaced expertise. One aspect of fiscal decentralisation is vertical specialisation, which in this case means that the fishery management and environmental protection belong to separate organising units. This is a separation within the Ministry of Agriculture, which governs two main branches divided between fisheries and marine protection. As a consequence, those two competencies are kept separate. In order to obtain the goals of less environmental deterioration and less exploitation of fishery resources, it is necessary that the competencies, or expertise, resides within the same organisational branch. Instead, in a situation such as in Guangdong, those who are responsible for environmental protection have no say in the implementation of the protection policies.

Conflict nutrition vs. sustainable politics (case 1)

Some of the problems of the *Guangdong fisheries* case have to do with the absence of alternative sources of nutrition and livelihood. Thus, there is an initial incompatibility between the aims of environmental protection and those of economic growth, a problem often referred to as the 'entrapment problem'. This problem is typical of many underdeveloped countries (see Chapter 7 on developing countries). The conflict is amplified because the Federal Management Bureau is responsible for policy implementation while also being the owner of an important fishing company.

Lack of solidarity within same generation (case 2)

A different aspect of institutional obstacles concerns lack of solidarity across current generations. In the *Saradar Sarovar* case we witnessed a situation of solidarity within

the same generation being compromised, that is, among different people having claims to the same resources. Although the project benefits some of those concerned, others – primarily poor and rural people – are disempowered. In this case both disempowered people and nature fall victim to deterioration. In a similar way, a lack of solidarity with future generations may cause damage to future people, as well as to the non-human environments, due to pollution and the overuse of natural resources by the current generation.

Need for collective environmental rights (cases 1 and 2)

The idea of environmental rights draws upon human rights in one important respect: broadly similarly to the way in which we allocate certain universal rights to humans, we are urged to think about the environment. The rationale for doing so is that the environment affects both human and non-human nature, and because emissions and the utilisation of natural resources affect people and environments far beyond the contexts in which the actions are carried out. Unlike individual human rights, environmental rights should be conceived as collective and solidarity rights (see also Chapter 2). On this account, the rights would be given to communities of peoples rather than to individuals. This perspective appears to be the most suitable one, as 'environment' does not seem comparable to individual human rights, one main reason being that it is hard to tell who should be held accountable and responsible for environmental damages. Talking of protection of the environment in terms of collective rights also turns the corresponding responsibilities into a collective concern. Further, such a perspective also requires that the rights encompass non-human nature, even if it is otherwise anthropocentric.

5.2 Motivational obstacles

Time preferences (case 1)

Short-termism in attitudes and policies has frequently been referred to as an obstacle to sustainable development for further discussion of motivational obstacles (see Chapter 9). Partly this has to do with shifting political regimes of different shapes, within democratic as well as non-democratic contexts. Several solutions have been suggested, among them transnational governance as an alternative to national and local forms of governance. Some of the arguments emphasise the need for considering non-human nature and the environment as commons rather than commodities. As such, nature and the environment are unlike many other tradable goods and services. In the cases discussed above we have witnessed vulnerabilities due to short-termism. In the *Guangdong* case the concern for meeting the needs for nutrition of the currently living overrides the need to protect the environments in the interest of other currently living and future generations. The *Sardar Sarovar* case, although in a different manner, also runs victim to short-termism, since neither the needs of all concerned people in the

area nor those of future generations are accommodated, as the project leads to environmental deterioration.

6 Developed and developing countries

Apart from the many obstacles to sustainable governance discussed above, there is another issue that further complicates the government of climate change, sustainability and intergenerational justice, namely, the unequal politics between more developed and less developed states (see Chapter 7 on developing countries). After setting out some of the general problems surrounding the currently often glossed-over differences between developed and less developed states, we will again use a real-world case: the government of Ecuador's Yasuni ITT Fund Initiative. This case nicely illustrates the pitfalls and complexities underlying the common suggestion of differentiated responsibilities of more and less developed states.

It is highly important to consider the differences between individual developed countries (DCs) and less developed countries (LDCs), since subscribing to universal moral principles and a human rights-based approach should not be mistaken for proposing abstract context-blind governance principles. As was pointed out in Chapter 7, many countries face difficult choices when it comes to where to invest and which of their obligations to fulfil, since economic development, environmental protection and addressing domestic poverty and intergenerational inequity will not always go hand in hand. In fact, in some cases they might be diametrically opposed. At the same time, one should be cautious not to let the perceived conflict between development and environmental protection, or between intra- and intergenerational justice, hegemonise the thinking and discourse around global environmental governance. There are many different ways in which countries can develop economically, though many of these paths will require certain forms of international collaboration.

However, in a world marred by unequal trade relations, exploitative foreign investment practices and a deeply unequal international political system, international collaboration is a thorny issue. While international collaboration and support appear to be a crucial element for successfully dealing with an issue as complex as global environmental change, we need to flesh out firmly what the slogan of common but differentiated responsibilities actually entails for potential duties of DCs to support environmentally sustainable development in LDCs without reproducing neocolonial power structures and dependencies. Current practices such as land grabbing, natural resource exploitation by foreign countries, or the disposal of toxic electronic waste in LDCs, obviously run counter to the ideal of fruitful collaboration.

The idea of common but differentiated responsibilities can be cashed out along different normative fault lines, depending on what is taken to be the origin of the differentiated responsibilities. Some see the origin of the differentiated responsibilities in countries' historical behaviour and the benefits they might have accrued; others connect the responsibilities countries have to wealth and the ability to pay. Either way, it is widely assumed that one of the major dividing lines is the separation of

highly developed countries from less developed ones. However, whether this distinction is the correct one remains controversial. Moreover, even if we were to agree on the origin of the differentiated responsibilities it is not at all clear how the differences in responsibility should be translated into action, since DCs are reluctant to see themselves as the ones who have to take the first step, and vice versa.

Case 3 The Yasuni ITTI

Take the question of global carbon sink conservation as a practical example: global carbon sink conservation raises a host of normative issues, since it is debatable, for instance, who should pay the costs of carbon sink conservation, who has the duty to protect which sinks (especially since not all sinks are terrestrial) and how far the duty to conserve one's carbon sinks extends (e.g. is it morally impermissible to cut down a small part of one's forests if that creates major benefits for the local population?). These normative questions are not of a mere theoretical nature. When Ecuador discovered major oil reserves under the area of its Yasuni National Park, the government founded the Yasuni Ishpingo–Tambococha–Tiputini Initiative (Yasuni ITTI), which asked foreign governments, NGOs and individual stakeholders to pay into a fund for the conservation of the Yasuni National Park. If by 2023 the fund would have generated donations of around US$3.6 billion, Ecuador would leave the oil reserves in the ground; if not, Ecuador would go ahead and extract the oil. The rationale behind the Yasuni ITTI was clear. Ecuador would preserve parts of its crucial global carbon sinks (and of the park's amazing biodiversity), but the costs of doing so (both direct and indirect) would have to be borne by foreign governments and other parties. In August 2013, the Yasuni ITTI was declared unsuccessful, due to insufficient contributions to the UN-administered fund.

The Yasuni ITTI was politically controversial, since some took it to be a case of ecological hostage taking: instead of finding a multilateral solution to the environmental challenges we face, Ecuador threatened to destroy part of its public good-providing carbon sinks in case the international community was not willing to pay. This seems problematic, since many would hold that Ecuador has a duty of justice to conserve its tropical forests, as part of global and intergenerational climate justice and as part of doing their share in governing the global commons. At the same time, many people hold that the developed states of the global North have a duty to bear (most of) the costs of fulfilling these duties of justice, since the only reason that Ecuador is in the difficult position to either protect its forests or exploit the oil, is anthropogenic climate change, which was largely caused by emissions from the global North. What is absent from this framing of the issue, though, is the question of the environmental and other rights violated.

Analysis of the Yasuni ITTI

Assessing whether setting up the Yasuni ITTI was legitimate and who is to blame for its failure, which means that large parts of the national park will be destroyed

and climate-damaging oil is going to be extracted, very much depends on how one conceptualises the very problem at hand. If one sees the *Yasuni* case as part of the global governance of the commons it seems fair to conclude that by even considering drilling for oil Ecuador's government failed to do its share in preserving the global commons. If one focuses on the idea that the national park with its massive rain forest is a crucial part of the global carbon cycle, it seems clear that Ecuador should have a duty to preserve its precious rain forests.

However, one could choose a different angle and see the rain forest in the national park as just one natural resource among many under national control. On this reading, it goes without saying that Ecuador – like any other country in the world – has the right to sovereign control over its natural wealth and resources, meaning that it is up to the people of Ecuador to decide what to do with its forests and oil reserves. In other words, Ecuador as a self-determining state has the right to control its resources and to do as it sees fit, which includes the right to extract the oil and to use the proceeds to advance economic development.

However, there is another rights angle that allows us to advance important normative claims regarding the Yasuni National Park and its oil reserves: on the one hand, there are the rights of the citizens of Ecuador, who have a right to be protected by their state against major risks and harms (whether that is future climate risks or the current risk of economic deprivation); on the other hand, there are the rights of the indigenous population within the Yasuni National Park, a group of Ecuador's population that lacks equal political rights. These indigenous people would lose their natural habitat if oil drillings went ahead, without ever being consulted on what should be done with the national park.

Moreover, one can approach the Yasuni ITTI from a global justice perspective, focusing on the fact that Ecuador did very little to cause global climate change, that the most powerful states in the world do little to help countries like Ecuador to develop economically, and that interfering with Ecuador's right to self-determination in the name of global climate governance seems paternalistic and hypocritical, considering how little DCs do to reduce their own emission footprints.

No matter which of these readings and claims one finds the most plausible, it seems that all of the voiced concerns and claims are relevant in this context. This goes to show that governing natural resources often cuts across a whole range of levels, from the local level (e.g. the indigenous people living in the Yasuni park), to the regional level (e.g. locals directly affected by use changes), to the national level (e.g. the people of Ecuador and the country's government), to the international level (e.g. other governments), to the global level (e.g. the users of the global commons). This of course raises the question at which level decisions should be made, whose claims should be heard and how legitimacy can be bestowed on such decisions if it is clear that not all relevantly affected parties can have an equal say in such matters. Furthermore, one can wonder whether in such cases democratic procedures help or hinder to achieve the goal of just and sustainable environmental governance.

Having considered the three case studies above and drawing on our analysis from sections 1–6, the next section will bring the key findings of the other chapters of

the book into our governance context, looking for common concerns where we can profit from further developing our interdisciplinary discussion of ethics of a green future.

7 Governance in view of remaining chapters of the book

The previous chapters of this book shed light on challenges, hopes and visions for human rights to a sustainable future for humankind and the environment. In dealing with rights (Chapter 2) it is claimed that protection of environmental goods is basic to human rights. Such rights need to be governed. One of the basic challenges is how to oblige current living people to take upon duties towards future people who are not yet brought into existence. As an example, there are no people in the future to reciprocate current people's actions directed at advantaging future generations. Perhaps some sort of indirect reciprocity would make sense. One concrete suggestion is to establish a system where future people could be represented politically, an arrangement that is further discussed in a separate chapter on political representation (Chapter 6). One basic question that is raised is whether there is a need for environmental rights as such, partly analogous to human rights. One obvious constraint for being a rights holder is to be capable of taking upon responsibilities and corresponding duties. In this respect, it is clear that environmental rights cannot be compared to individual human rights. This is also a reason why caring for the environment for all – current and future generations – need to be understood in terms of a different kind of rights for all. Governance of rights privileging current and future generations on a global scale needs to undertake a careful examination of the particular contextual conditions. This is what this book aims for, in considering e.g. legal, economic, motivational and risk aspects in their various contexts.

One reason why general models, or a one-size-fits-all mentality works poorly when discussing rights to a sustainable future has to do with risks (Chapter 3). Not only are environmental risks hard to predict in environmental contexts, particularly due to uncertainty. This is mainly due to the fact that the kind of risks in view are exempted from the possibility of calculating probabilities. Thus, we have to act upon the precautionary principle without being able to know exactly what kind of precautions need to be taken. Besides, one complicating matter is to what extent people may have rights against risking, as some risks are necessary in order to appreciate a right to a meaningful life. Additionally, there is also the case that people experience risks differently. The contextual stakes are obviously high. At a governance level a rights-based approach may give a rough guidance with respect to risks, but this has to be context sensitive.

The lack of knowledge about the future is highlighted in the chapter on scenarios (Chapter 4). Any discussion of what might happen in the future has to be based upon uncertainties, as also discussed in the chapter on risks. In the scenario chapter, it is argued that scenarios must be based on narratives and informed qualitative and fact-based reasoning, warning that policies on environmental rights must not be based on unchangeable and decontextualised 'iron laws'.

The right to life for future generations raises a question whether it would be possible to safeguard future generations through legal arrangements. A move in such a rights-based direction has been done in the past, in the United Nations Conference held in Stockholm 1972, but has not been developed further since then, e.g. in Rio 1992 (Chapter 5). The way to safeguard future generation was discussed in terms of environmental rights, as distinct from human rights. As is pointed out in this chapter there has ever since 1972 been a question of more soft law, focusing on moral and political rather than legal rights. Still, there is an environmental linkage in the legal debate between human rights and future generations. Since it is difficult to allocate rights be it to the environments as such, or to future generations, there has instead taken place a greening of existing human rights. A legal approach has to be based in protection of identifiable lives, not life as such. Thus, the current juridical framework puts limits to how far it is possible to go in the direction of rights to the environments or to future people we do not yet know who they are. The most promising attempt to accommodate future generations' rights to life after the Stockholm 1972 has been the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, through the *actio popularis* claim, which includes future people in terms of 'members of the public'. As argued in this chapter, without *actio popularis* in relation to the environmental damage it is hard to make claims on behalf of those who will suffer in the future. One strategy suggested in this chapter is to broaden the concept of 'victim' and to give room for group-based rights. Another possible route which was mentioned earlier in this chapter would be to establish an international court for the environment, which would need to go hand in hand with a strengthening and extension of existing environmental rights frameworks, along the lines discussed in Chapter 2.

The possibility of safeguarding future people has been extensively discussed in terms of political representation of future generations (Chapter 6). The idea to include future generations through representatives has been set to work in some democratic contexts, notably within governmental bodies. This far such arrangements, e.g. through an Ombudsman, has not succeeded in coming up with a model to be embraced by a majority of democratic states. One reason may be because the focus this far has been on political institutions. As suggested in Chapter 6, one should rather look to NGOs, firms and educational institutions in order to engage the public more directly. Apart from that, one idea suggested here is to have separate institutions for environmental protection, which could then be a tool to represent future generations. Again, like in most of the chapters of this book, we face the problem of assigning particular rights to non-identifiable future people.

Economics is still another frame for discussing accommodation of future generations. The most prevailing problem from an economics aspect is probably the overuse of common property such that there is not enough left for future people (Chapter 8). Along with the overuse of common property resources there is also the underproduction of collective common goods, as well as negative externalities. Anthropogenic climate change causes negative externalities, and in this chapter, it is

argued that we cannot escape them. Rather, it is a question of how much environmental pollution should be justified? If this argument is sound, the question still remains to what extent negative externalities in terms of an optimal amount of environmental pollution is possible to apply to future generations, not least given the uncertainties and risks discussed in Chapter 3.

The quest for more contextualised or tailor-made arrangements for accommodating future generations becomes particularly urgent when discussing developing countries (Chapter 7). One approach is to focus on economic and ecological depths, and the question of uncompensated disadvantages for people in developing countries. One alerting problem is how countries that are not able to accommodate the current generation should make sacrifices for safeguarding future generations. The resource curse is a particular case in view, i.e. countries who are rich in natural resources still remain in poverty due to e.g. bad governance, dictatorship, economic usurpation and others, the main problem often being that political institutions fail to act impartially in the public interest. The problem of entrapment appears to be a general problem across the diversity of developing countries, one example being that investment for future generations seems undoable as long as the current living are starving. In this chapter, it is argued that there should be less duty for developing countries to spend resources to protect future generations, as compared to developed countries. The 'polluter pay principle', or 'beneficiary pays principle' is advanced as an argument in favour of justifying less duties for developing countries. The main appeal being made is to the following general, although contextual circumstances of developing countries: economic vulnerability, institutional weakness and entrapment. It is further claimed that the problem ought to be viewed as global rather than national, i.e. we should look for cooperative solutions to the problems. Besides, it is necessary to look for tailor-made solutions, as developing countries are diverse with respect to what cases the problems in each particular context.

The need to look carefully into particular contexts is also emphasised in the chapter om motivation (Chapter 9). The motivational problem connected with ethics of a green future is identified as a gap between norms and conformity, i.e. the problem to act upon what we believe. Four particular obstacles are identified in this chapter: time preference, non-reciprocity and uncertainty, of which the latter two are also discussed in the chapters on rights, risk and political representation. Additionally, there is also the threat of maintenance of habitualised lifestyles. These are held to be motivational obstacles to safeguarding a sustainability for future generations. One main problem discussed in this chapter is the problem of abstract risks where, in dealing with statistical rather than identified victims (see Chapter 5 on legal implementation). Given these problems of motivation, rather than acting on direct motivations we should instead focus on indirect motivations (love, pity, care, solidarity), then appealing to the heart, captured in the concept of 'chain of love'. Self-binding is further discussed as a strategy to handle the motivational problem, internally or through institutions. In doing so, we need to confront the abstract models for such arrangements with real-life problems, a task recommended for ethics as a philosophical discipline.

8 Concluding remarks

At the beginning of this chapter we said that we would highlight possible roads to sustainable politics and governance. As our discussion above showed it is indeed necessary to think of different roads rather than a single road in order to address the problems and challenges that lie before us. The demands of intergenerational justice and environmental sustainability cut across a host of different dimensions and levels, making it necessary to devise context-sensitive policies. However, in so doing, we think that three crucial aspects should be kept in mind. First, any lifestyle and production changes in the most developed countries ultimately only contribute to a solution if rebound effects are minimised. Similarly, second, a possible move to sufficiency and/or frugality has to go hand in hand with a shift in resources and power to those currently disadvantaged. Consequently, third, following Caney (2012), environmental policymaking needs to avoid the pitfalls of atomism and isolationism, that is, climate policy must be contextualised within the wider context of existing inequalities in economic and political power, vulnerability and coping capacity. In other words, environmental governance needs to be problem-solving and context-sensitive, and it needs to address wider inequalities.

Governance in view of the other chapters of this book points to a need for careful consideration of the particular context for governance of *rights* to a green future. In discussing rights there is a quest for adequate human rights, and a corresponding need to find ways of regulating such rights. A rights-based approach to *risk* problems give us a rough guidance, but then we need to be sensitive to the context in implementing this at a governance-level. Further in creating *scenarios,* politics should not be based on decontextualised hard laws, and when looking for good ways of governing *legal* arrangements we should leave room for group-based rights and a broadened concept of 'victim'. When setting out to find out how to *represent future generations* politically it is suggested that we look for suitable NGOs, firms and educational institutions rather than embedding the representation in general political institutions. *Economics* questions of negative externalities also need to pay attention to particular contexts in order to decide how much environmental pollution should be justified. The discussion of duties of *developing countries* to accommodate future generations asks for tailor-made governance arrangements. Lastly, when it comes to governance aspects of the motivation problem we need to confront our abstract models with real-life problems, asking what is needed in the particular context in question. This is a challenge for ethics, which we have tried to accommodate in cooperation with the other fields of inquiry presented in this book.

In the beginning of this chapter, we raised the question of whether effective global environmental governance requires the establishment of a global environmental agency or an international court for the environment in terms of a global enforcing mechanism. However, central decision-making and enforceability are only two of a range of important aspects which might contribute toward a better environmental governance system. Therefore, coming to the end of this chapter, while we still believe that there is a need to look at least in part for global solutions,

we want to highlight what we emphasised throughout this chapter, namely, that we should build our solutions around contextualised models of governance mechanisms. This points to a need for better fit methodologies for governance implementation, while not losing sight of a global perspective as such. After all, intergenerational justice, rights to a green future and environmental rights cannot be obtained at local or national levels in isolation. Still, the governing mechanisms have to work at all levels in each particular context. The requested context sensitivity seems to be missing in the governance arrangements we have witnessed thus far.

In light of the issues discussed in this book in general and this chapter in particular, academics should aim to provide policymakers and activists with at least a rough road map of how to conceptualise people's rights to a green future, how to regulate intergenerational risks and how to implement pathways to sustainable governance. This is precisely the aim of the research agenda in the next chapter; it sets out where further research is needed, which issues must be given priority and how we might address the practical questions surrounding people's rights to a green future.

Notes

1 Agenda 21 is a non-binding, voluntarily implemented action plan of the United Nations with regard to sustainable development. It is a product of the 1992 Earth Summit (UN Conference on Environment and Development). Agenda 21 is an action agenda for the UN, other multilateral organisations, and individual governments around the world that can be executed at local, national and global levels. It has been affirmed and modified at subsequent UN conferences.
2 Some people of course claim that a lack of democratic control might be a good thing, since environmental policy (and possibly other policies, too) should not depend on public support and applause form the constituency, especially in cases in which present well-being's losses are necessary for the securing of future well-being opportunities.
3 For a detailed discussion of this case, see Weber (2015).
4 An example of the former kind of rights of the non-human environment is Bolivia's Law of the Rights of Mother Earth, while an example of the latter kind of environmental human right can be found in the South African constitution, ch. two s. 24, which affirms every citizen's right to a non-harmful environment.
5 This of course also means that people are vulnerable to risk in more than one way, making it thus policymakers' task to socially distribute risks in light of existing inequalities in risk vulnerability.
6 See Hardin (1968) and Ostrom (1990/2015).

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